

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARSMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. 1430 Algranding, Victoria 22313-1450 www.uspin.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/721,506	11/26/2003	Savva Andreas	826.1907	6127	
21171 7590 06/21/2007 STAAS & HALSEY LLP			EXAM	EXAMINER	
SUITE 700			WALSH, JOHN B		
1201 NEW YO WASHINGTO	ORK AVENUE, N.W. ON DC 20005		ART UNIT	PAPER NUMBER	
	71, 20 20003		2151		
			MAIL DATE	DELIVERY MODE	
			. 06/21/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
	10/721,506	ANDREAS, SAVVA				
Office Action Summary	Examiner	Art Unit				
	john walsh	2151				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on	<u>_</u> .					
2a) This action is FINAL . 2b) ⊠ This	action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) Claim(s) 1-14 is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-14</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	r election requirement.					
Application Papers						
9)☐ The specification is objected to by the Examine	r.					
10)⊠ The drawing(s) filed on <u>26 November 2003</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a)⊠ All b)□ Some * c)□ None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
See the attached detailed Office detion for a list	or the doration deploy not receive					
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) Interview Summary	(PTO-413)				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Do	ate				
3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	6) Other:	atom Application				

Art Unit: 2151

DETAILED ACTION

Claim Rejections - 35 U.S.C. 101

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 101 that form the basis for the rejections under this section made in this Office action:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-4, 6-11, and 13 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claimed invention does not fall within at least one of the four categories of patent eligible subject matter recited in 35 U.S.C. 101. The claims appear drawn an embodiment of computer software (i.e. driver).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 3. Claims 1-14, as best understood, are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,804,673 to Sugahara et al.

As concerns claims 1 and 8, a host in a network of a plurality of hosts, the host and the plurality of hosts having an RDMA function, comprising: a unit (column 1 line 19 – node in the computer network) sending a first message (column 1 line 23 - data

Application/Control Number: 10/721,506

Art Unit: 2151

exchange between user memories) indicating the host boots, to all of the plurality of hosts in the network when the host in the network boots (column 1 lines 45-50 – initiator obtains information about RDMA access, column 2 lines 7-8 – transaction initiated/booted by first device); a unit disabling RDMA access from the plurality of hosts to the host (column 5 lines 33-35 – a signal is generated to prevent further requests); a unit responding to the first message by sending to the host a second message (column 2 lines 7-11 - exchange of messages); and a unit sending a third message (column 5 lines 21-38 – series of messages used to indicate communication between hosts) indicating the host is ready to accept RDMA access from the plurality of hosts, to all of the plurality of hosts after the second messages from all of the plurality of hosts have been received and the RDMA function is enabled (column 4 lines 4-8 – RDMA is enabled when target address is within access space, column 9 line 5 - device is enabled).

As concerns claims 2 and 9, a driver (column 3 lines 40-44 – configuration program detects the presence of the devices) in the apparatus of the host.

As concerns claims 3 and 10, a translation and protection table unit having information (column 8 lines 56-59 - assurance information is received by the network adaptor) for making an RDMA access to another host, and wherein when the first message is received, the information about the host which sent the first message is cleared from the translation and protection table unit in order to make RDMA access to the host impossible (column 8 lines 60-64 - access to information by host unavailable).

Application/Control Number: 10/721,506

Art Unit: 2151

As concerns claims 4 and 11, wherein the translation and protection tables (column 7 lines 38-40 – PCI memory space of the PCI bus, column 7 lines 51-52 – logs stored in a random access memory (error RAM)) in the plurality of hosts are updated after the third message is sent to the plurality of hosts.

As concerns claims 5 and 12, wherein the second message (column 7 line 44 – acknowledgement sent back in a response packet) is one of acknowledgment, non-acknowledgment and the first message sent from one of the plurality of hosts and the non-acknowledgment is generated by hardware (column 7 line 45 – PCI network adaptor sends the write packet to the hosts).

As concerns claims 6 and 13, wherein whether the second message has been received from all of the plurality of hosts or not is tracked and determined by a replied set which comprises a sequence of 0s and 1s (column 10 line 15 – response packet sent to signal the completion of the RDMA process).

As concerns claims 7 and 14, wherein the host is installed with a network interface card (column 9 lines 20-25 – PCI network adaptor returns the access assurance information to the first device), which has the RDMA function (column 10 lines 12-18 – remote direct memory access transaction forms a response packet and sends to PCI network adaptor) and another message communicating function, and initialization of the RDMA function and another message communicating function is conducted independently.

Application/Control Number: 10/721,506 Page 5

Art Unit: 2151

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Walsh whose telephone number is 571-272-7063. The examiner can normally be reached on Monday-Friday (9am-5pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on 571-272-3939. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DOHN WALSH
PRIMARY EXAMINER